



## **GE Vernova, Governor Hochul announce more than \$105 million investment in Advanced Research Center to drive energy innovation**

- Investment to construct state-of-the-art labs centered on electrification and decarbonization
- Enables technology advancements including carbon dioxide removal, alternative fuels for power generation, the grid of the future, and critical infrastructure security
- Company also announces additional \$15 million investment at Advanced Research Center and \$88 million investment in Gas Power and Wind facilities in Schenectady

**NISKAYUNA, NY (January 29, 2025)** – To help deliver on the world’s growing energy demands and the breakthrough technologies of tomorrow, New York Governor Kathy Hochul and GE Vernova Inc. (NYSE:GEV) today announced a planned investment of more than \$105 million into the company’s Advanced Research Center in Niskayuna, New York. This investment is expected to strengthen the Center’s electrification and decarbonization efforts, enable continued recruitment of top-tier talent, and push forward transformative technologies including carbon dioxide removal, alternative fuels for power generation, the grid of the future, critical infrastructure security and more.

The State of New York has committed \$9.635 million in tax credits through Empire State Development (ESD) to the project, with GE Vernova making a planned investment of nearly \$100 million in 2025. Schenectady County Metroplex Development Authority has also been invited by ESD to apply for potential FASTNY grant funds to supplement infrastructure build out at the site.



“The clean energy future is bringing new investments, good-paying jobs and a cleaner environment to our state, and we’re proud to work alongside GE Vernova as we further our shared vision in Niskayuna and beyond,” **Governor Hochul** said. “New York is becoming a leading manufacturing and R&D hub for clean energy; bringing us closer to achieving our climate agenda and building a better, cleaner future for generations to come.”

“GE Vernova is committed to strengthening its world class research and development center designed to advance the world’s progress in the energy transition, continuing our long history of innovation here in the Capital Region” said **[David Vernooy](#), Vice President Advanced Research, GE Vernova**. “This investment aims to enable game changing technologies through state-of-the-art labs, a new customer experience center, and collaboration space to advance partnerships with governments, customers, thought leaders and innovators alike. We are ready to lead, and excited about the breakthroughs this investment will bring forward.”

GE Vernova’s Advanced Research Center (ARC) team actively and closely partners with stakeholders, including the U.S. Department of Energy and the US Department of Defense. ARC plans to significantly expand its research staff, hiring 75 new researchers, and through new labs, enabling a significant step-up in research and development across multiple technologies, including:

- **Carbon dioxide removal:** Demonstration of a 10 ton per year Direct Air Capture system enabled by GE Vernova’s world-class sorbents, innovative cycling, and modular design.
- **Alternative fuels/H2 for power generation:** Combustion technologies and utilization pathways to enable low carbon intensity fuels.
- **Building grid resilience:** Create a highly connected, renewable ready, digitized, and more secure grid of the future.
- **Advanced manufacturing technology for wind energy:** State of the art robotics and AI inspection technology to drive a step change in wind blade manufacturing and quality.

- **Long duration energy storage breakthrough:** Enabling renewable energy to meet its full potential with low-cost reliable energy storage solutions, ranging from pumped hydro to advanced chemical storage systems.
- **Critical infrastructure security:** Advanced digital frameworks and robust hardware solutions for national energy assets.
- **Product sustainability technology:** Identifying and implementing a low carbon supply chain for critical components in sustainable energy.

Some examples of the new technologies under research and development at GE Vernova's Advanced Research Center are detailed below.

### **Carbon Dioxide Removal**

Carbon capture is a critical piece of the energy transition, to capture point source emissions from power generation and enable removal of carbon directly from the atmosphere. This investment will allow GE Vernova to build a cutting-edge, premier laboratory space to drive down the energy use and capital expenditure of carbon capture.

The new lab will work towards demonstration of a 10 ton-per-year Direct Air Capture test stand enabled by our world-class sorbents, innovative cycling, and modular design. This size is chosen to make necessary adjustments so the design is scalable and economical at a significant level, a necessary step to meet the world's climate goals and ensure widespread usage of the technology.

### **Alternative Fuels for Power Generation**

The fuels of the future will help determine how quickly and efficiently the world can electrify and decarbonize, and GE Vernova is actively working across multiple types of fuels. Developing and delivering fuels that will allow combustion without carbon, such as hydrogen or ammonia is an immediate focus, alongside longer-term work utilizing electrolyzers to create hydrogen, combine it with CO<sub>2</sub> and make safer, carbon-neutral synthetic fuels.

### **Building Grid Resilience**

GE Vernova's Advanced Research Center team plans to invest more heavily in



Multi-Terminal HVDC, a key to expanding the capabilities and functionality of the U.S. grid of the future. It will also strengthen the ability to connect multiple sources of power generation to the grid.

HVDC is a more economical and efficient way to transmit power over long distances, but current technologies do not allow for “off-ramps” between the point of generation and the end of the transmission line. For example, if an HVDC line starts in one state and delivers power to another, it cannot deliver power to areas in other states along its path. Multi-Terminal HVDC offers the possibility of coast-to-coast transmission superhighways, efficiently delivering electricity across long distances.

### **Additional Investment in AI**

In a separate investment at the company’s Advanced Research Center, GE Vernova plans to invest \$15 million into AI efforts. GE Vernova’s Advanced Research Center has a generations-long history of developing game-changing technologies, such as gas turbine technology designed to be the world’s most efficient gas turbine, advanced algorithms for efficient, resilient grid planning, operations, and maintenance, small modular nuclear reactors, and 100% hydrogen combustion for carbon-free power generation.

### **Investing in Historic Schenectady Facility**

GE Vernova also shared today nearly \$90 million in planned investments at its iconic Schenectady facility.

In Schenectady, NY, as previously announced, GE Vernova is planning to hire on more than 100 new jobs in 2025, and is investing over \$50 million to support capacity growth and sustainability, industrialization and quality efforts.

To further strengthen the U.S. supply chain for renewable energy through factory upgrades and tooling and fixtures investments, GE Vernova’s Wind business is planning to invest more than \$30 million in Schenectady. This follows a previously announced \$50 million investment to build a new manufacturing line in Schenectady that created more than 200 new jobs.



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### **About GE Vernova**

GE Vernova is a planned, purpose-built global energy company that includes Power, Wind, and Electrification businesses and is supported by its accelerator businesses of Advanced Research, Consulting Services, and Financial Services. Building on over 130 years of experience tackling the world's challenges, GE Vernova is uniquely positioned to help lead the energy transition by continuing to electrify the world while simultaneously working to decarbonize it. GE Vernova helps customers power economies and deliver electricity that is vital to health, safety, security, and improved quality of life. GE Vernova is headquartered in Cambridge, Massachusetts, U.S., with approximately 75,000 employees across 100+ countries around the world. GE Vernova's Advanced Research business is an innovation powerhouse, operating at the intersection of science and creativity to turn cutting edge research into impactful realities. Advanced Research collaborates with GE Vernova's businesses across a broad range of technical disciplines to accelerate the energy transition. Learn more: [GE Vernova](#) and [LinkedIn](#).

### **Forward-Looking Statements**

This document contains forward-looking statements – that is, statements related to future events that by their nature address matters that are, to different degrees, uncertain. These forward-looking statements often address GE Vernova's expected future business and financial performance and financial condition, and the expected performance of its products, the impact of its services and the results they may generate or produce, and often contain words such as "expect," "anticipate," "intend," "plan," "believe," "seek," "see," "will," "would," "estimate," "forecast," "target," "preliminary," or "range." Forward-looking statements by their nature address matters that are, to different degrees, uncertain, such as statements about memoranda of understanding and the expected impact of the relationships created thereunder, contract and project proposals, bidding processes, government review processes and competitions, investments or projects and their expected results and the impacts of macroeconomic and market conditions and volatility on the Company's business operations, financial results



and financial position and on the global supply chain and world economy.

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